Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

Claim 1 (currently amended): A method for analyzing a circuit design comprising: reading violations of a specification for a circuit design;

identifying symptoms of the violations of the circuit design specification based on the circuit design being analyzed;

identifying solutions to the violations of the circuit design specification based on the identified symptoms using data in a solutions database, wherein the solutions database includes a list containing one or more circuit design violations and one or more solutions, based on circuit characteristics, corresponding to the one or more circuit design violations contained in the list; and

proposing a proposed solution based on data stored in the solutions database.

Claim 2 (original): The method of claim 1, further comprising: running an E-CAD tool on the circuit design; and detecting violations of the specification using the E-CAD tool.

- Claim 3 (original): The method of claim 2, further comprising storing the violations to a violations file, and wherein the step of reading violations comprises reading the violations file.
- Claim 4 (original): The method of claims 2, further comprising configuring the E-CAD tool to the circuit design using a configuration file.
- Claim 5 (original): The method of claim 1, further comprising:
 receiving a selected solution;
 re-configuring an E-CAD tool based on the selected solution; and
 re-running the E-CAD tool on the circuit design.
- Claim 6 (original): The method of claim 5, wherein the step of proposing the proposed solution comprises displaying at least one proposed solution on a display device, and

wherein the step of receiving the selected solution comprises receiving an input signal from an input device.

- Claim 7 (original): The method of claim 5, wherein the step of re-configuring comprises editing a configuration file of the E-CAD tool.
- Claim 8 (original): The method of claim 1, further comprising storing data related to symptoms and solutions for the circuit configuration in the solutions database.
- Claim 9 (original): The method of claim 1, wherein the steps of reading violations, identifying symptoms, identifying solutions, and proposing the proposed solution comprise using a software configuration tool stored in a computer memory.
- Claim 10 (currently amended): A computer system for analyzing signals in a circuit design stored in a memory, the system comprising:
 - a storage medium; and
- a processor for executing a software program stored on the storage medium for analyzing a circuit design, the software comprising a set of instructions for:

reading violations of a specification for a circuit design;

identifying symptoms of the violations <u>of the circuit design specification</u> based on the circuit design <u>being analyzed;</u>

identifying solutions to the violations of the circuit design specification based on the <u>identified</u> symptoms using data in a solutions database, wherein the solutions database includes a list containing one or more <u>circuit design</u> violations and one or more <u>solutions</u>, <u>based on circuit characteristics</u>, corresponding to the one or more <u>circuit design</u> violations contained in the list; and

proposing a proposed solution based on data stored in the solutions database.

Claim 11 (original): The system of claim 10, further comprising instructions for: configuring an E-CAD tool to the circuit design using a configuration file; running the E-CAD tool on the circuit design; detecting violations of the specification using the E-CAD tool; and storing the violations to a violations file; and

wherein the step of reading violations comprises reading the violations file.

- Claim 12 (original): The system of claim 11, further comprising instructions for: receiving a selected solution; re-configuring the E-CAD tool based on the selected solution; and re-running the E-CAD tool on the circuit design.
- Claim 13 (original): The system of claim 10, further comprising instructions for: receiving a selected solution; and editing a configuration file of an E-CAD tool based on the selected solution.
- Claim 14 (original): The system of claim 13, wherein the step of proposing the proposed solution comprises displaying at least one proposed solution on a display device, and wherein the step of receiving a selected solution comprises receiving an input signal from an input device.
- Claim 15 (currently amended): A computer-readable medium having computer-executable instructions for performing a method for analyzing a computer representation of a circuit design, the method comprising:

reading violations of a specification for a circuit design;

identifying symptoms of the violations of the circuit design specification based on the circuit design being analyzed;

identifying solutions to the violations of the circuit design specification based on the identified symptoms using data in a solutions database, wherein the solutions database includes a list containing one or more circuit design violations and one or more solutions, based on circuit characteristics, corresponding to the one or more circuit design violations contained in the list; and

proposing a proposed solution based on data stored in the solutions database.

Claim 16 (original): The medium of claim 15, the method further comprising: configuring an E-CAD tool to the circuit design using a configuration file; running the E-CAD tool on the circuit design; detecting violations of the specification using the E-CAD tool; and storing the violations to a violations file; and

wherein the step of reading violations comprises reading the violations file.

- Claim 17 (original): The medium of claim 16, the method further comprising: receiving a selected solution; re-configuring the E-CAD tool based on the selected solution; and re-running the E-CAD tool on the circuit design.
- Claim 18 (original): The medium of claim 15, the method further comprising: receiving a selected solution; and editing a configuration file of an E-CAD tool based on the selected solution.
- Claim 19 (original): The medium of claim 18, wherein the step of proposing the proposed solution comprises displaying at least one proposed solution on a display device, and wherein the step of receiving a selected solution comprises receiving an input signal from an input device.
- Claim 20 (original): The medium of claim 18, the method further comprising re-running the E-CAD tool on the circuit design.